



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/965,279	09/25/2001	Michael Huebler	2001P15528US	3834

7590 02/10/2005
Siemens Corporation
Attn: Elsa Keller, Legal Administrator
Intellectual Property Department
186 Wood Avenue South
Iselin, NJ 08830

EXAMINER

SCHUBERT, KEVIN R

ART UNIT	PAPER NUMBER
----------	--------------

2137

DATE MAILED: 02/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/965,279

Applicant(s)

HUEBLER ET AL.

Examiner

Kevin Schubert

Art Unit

2137

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 September 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-36 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 September 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 09252001.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Art Unit: 2137

DETAILED ACTION

Claims 1-36 have been considered.

Specification

5 The Specification is objected to for failing to provide proper antecedent basis for the claimed subject matter. See CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: the Specification needs to be amended to discuss the process for evaluating whether a second non-volatile memory is a clone (particularly in reference to claims 20-22). No mention of retrieving a third identification code or generating a third electronic signature is disclosed in the Specification. Appropriate
10 correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

15 A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

20

Claims 1-9,12-22,25-31,33-34, and 36 are rejected under 35 U.S.C. 102(b) as being anticipated by Osborn, U.S. Patent No. 6,026,293.

As per claims 1,14,25, and 34, the applicant describes a method for preventing cloning of an
25 electronic device comprising the following limitations which are met by Osborn:

a) generating a first electronic signature from a first identification code and a second identification code, the second identification code being suitable for uniquely identifying a hardware component of the electronic device (Col 6, lines 34-37; Col 8, lines 24-28);

Art Unit: 2137

b) decrypting an encrypted electronic signature for generating a second electronic signature (Col 6, lines 39-41);

c) comparing the first electronic signature and the second electronic signature (Col 6, lines 41-45);

5 d) departing from normal operation of the electronic device if the first electronic signature and the second electronic signature differ (Col 6, lines 41-45);

The applicant should note that Osborn discloses a method for preventing the cloning of mobile phones (Col 3, lines 41-59) which is identical in scope to the method for preventing the cloning of mobile phones that is disclosed by the applicant.

10 Regarding part a), the "electronic signature" that the applicant refers to is a hash (see 408 and 402 of Applicant's Fig 4) as opposed to a digital signature. In the same manner as the applicant's method, the electronic signature, or hash, is generated by an ESN and a value from the flash memory (Osborn: Col 8, lines 24-28) (Applicant: 404 and 406 of Fig 4). Furthermore, the ESN can be either the first or second ID code as the ESN is used to uniquely identify the hardware of an electronic device. A
15 content value from the flash memory corresponds to the first or second ID code, depending on which one the ESN is not.

Regarding claim 14, the claim includes the additional limitation of storing the electronic signature and the second identification code in memory. The ESN, or second identification code and the hash, or electronic signature, are stored in EEPROM as illustrated by Fig 4. Osborn also discloses storing the
20 electronic signature in encrypted form (Col 6, lines 39-41).

Regarding claim 25, the claim includes the additional limitations of a non-volatile memory and a controller which can be seen in Fig 4.

As per claim 2, the applicant describes the method of claim 1, which is anticipated by Osborn
25 (see above), with the following limitation which is also anticipated by Osborn:

Further comprising retrieving the encrypted electronic signature, the first identification code and the second identification code from a non-volatile memory (Col 6, lines 39-41; Col 8, lines 24-28);

Art Unit: 2137

As per claims 3,15,21, and 27, the applicant describes the method of claims 1,14,20, and 25, which are anticipated by Osborn (see above), with the following limitation which is also anticipated by Osborn:

5 Wherein generating the first electronic signature comprises using a hash function for computing the first electronic signature from the first identification code and the second identification code (Col 6, lines 34-37).

As per claims 4,16,22, and 28, the applicant describes the method of claims 3,15,21, and 27, which are anticipated by Osborn (see above), with the following limitation which is also anticipated by Osborn:

Wherein the hash function comprises an MD5 algorithm (Col 12, lines 56-58).

As per claims 5,17, and 29, the applicant describes the method of claims 1,14, and 25, which are met by Osborn (see above), with the following limitation which is also anticipated by Osborn:

Wherein decrypting the encrypted electronic signature further comprises using a decryption key (Col 6, lines 39-41; Col 8, lines 30-32).

As per claims 6,18, and 30, the applicant describes the method of claims 4,17, and 25, which are met by Osborn (see above), with the following limitation which is also anticipated by Osborn:

Wherein the encrypted electronic signature is encrypted using a public key encryption algorithm and the decryption key comprises a public key (Col 8, lines 30-32).

As per claims 7,19, and 31, the applicant describes the method of claims 6,18, and 30, which are met by Osborn (see above), with the following limitation which is also anticipated by Osborn:

Wherein the public key encryption algorithm comprises a " $c=m^e \text{ mod } n$ " public key encryption algorithm (Col 13, line 53).

Art Unit: 2137

As per claims 8,33, and 36, the applicant describes the method of claims 1,25, and 34, which are met by Osborn (see above), with the following limitation which is also anticipated by Osborn:

Wherein the first identification code comprises an electronic serial number (ESN) (Col 8, lines 24-28).

As per claim 9, the applicant describes the method of claim 1, which is met by Osborn (see above), with the following limitation which is also anticipated by Osborn:

Wherein the hardware component comprises a non-volatile memory of the electronic device and the second identification code comprises an identification code suitable for uniquely identifying the non-volatile memory (Col 8, lines 24-28);

If one considers the ESN to be the second identification code, the claim is met because the ESN uniquely identifies the hardware and the memory of the unit which it corresponds to.

As per claim 12, the applicant describes the method of claim 1, which is met by Osborn (see above), with the following limitation which is also anticipated by Osborn:

Wherein departing from normal operation of the electronic device comprises inhibiting normal use of the electronic device (Col 6, lines 41-45).

As per claim 13, the applicant describes the method of claim 1, which is met by Osborn (see above), with the following limitation which is also anticipated by Osborn:

Wherein departing from normal operation of the electronic device comprises allowing normal use of the electronic device while providing a warning to at least one of a user of the electronic device and a network in which the device is used that the electronic device has been used to clone a second electronic device (Col 6, lines 41-45).

Art Unit: 2137

As per claim 20, the applicant describes the same limitations of claim 14, which are met by Osborn (see above), in the situation of a second non-volatile memory, which is a clone of the first non-volatile memory. In the same manner as the applicant's system, Osborn discloses that a cloner can reprogram a cloned memory, or second non-volatile memory (Col 9, line 63 to Col 10, line 7). In this situation, the recalculated hash (second signature) which is made up of a third identifier (flash memory content identifier specific to the cloned device) and a second identifier (ESN).

The same process as described in the rejection for claim 14 takes place, but this time the cloner gets a hash value which differs from the stored hash value (or signature) because the unique flash memory content identifier is different and a cloner is prevented from being able "to defraud the cellular carrier" (Col 10, line 3).

As per claim 26, the applicant describes the method of claim 25, which is met by Osborn (see above), with the following limitation which is also anticipated by Osborn:

Wherein the controller retrieves the encrypted electronic signature, the first identification code and the second identification code from at least one of the non-volatile memory and a second non-volatile memory of the electronic device (Fig 4; Col 8, lines 24-28).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 10-11,23-24,32, and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Osborn.

Art Unit: 2137

As per claims 10-11,23,32, and 35, the applicant describes the method of claims 1,14,25, and 34, which are anticipated by Osborn (see above), with the following limitation which is also anticipated by Osborn:

5 Wherein the hardware component comprises a non-volatile flash memory, and the second identification code comprises a flash hardware serial number permanently stored in flash memory (Col 9, lines 63-67; Col 10, lines 1-7);

Osborn discloses all the limitations of the independent claims. Osborn also discloses that the hash algorithm is computed from the ESN and elements of the flash memory, which he does not name and leaves open. The applicant describes that the hash algorithm is computed from the ESN and elements of the flash memory which he specifically names.

10

Claims 10,23,32, and 35 disclose the limitation that the specific element of the flash memory is a hardware serial number and claim 11 discloses that the specific element of the flash memory is a processor identification code. It would have been obvious to one of ordinary skill in the art at the time the invention was filed to incorporate the use of these two specific elements of the flash memory into Osborn's system because these two elements are appropriate input elements for conducting a hash operation that maintains security within the device.

15

As per claim 24, the claim is met by the rejection for claim 8 (see above) but is rejected under U.S.C. 103(a) because the claim depends on claim 23, which is rejected under U.S.C. 103(a).

20

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin Schubert whose telephone number is (571) 272-4239. The examiner can normally be reached on M-F 8:00-5:00.


25

Art Unit: 2137

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Caldwell can be reached on (571) 272-3868. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application
5 Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

10


ANDREW CALDWELL
SUPERVISORY PATENT EXAMINER

15